Claims

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1. The use of a compound of Formula (I), for the manufacture of a medicament to inhibit and/or reverse and/or alleviate symptoms of angiogenesis and/or any disease state associated with angiogenesis,

$$(R^1)_q$$
 $(CH_2)_p$
 R^3
 R^4

Formula (I)

wherein:

R¹ is independently selected from halo, hydroxy, amino, alkanoylamino, —OPO₃H₂, or C₁₋₄alkoxy, wherein the amino group is optionally substituted by an amino acid residue and the hydroxy group is optionally esterified;

X is selected from: -O, -S, -SO, or $-SO_2$;

R² is selected from: hydrogen, C₁₋₄alkyl or C₁₋₄alkoxy;

R³ and R⁴ are independently selected from: hydrogen, C₁₋₄alkyl, C₁₋₄alkanoyl, C₁₋₄alkoxycarbonyl, C₁₋₄alkoxycarbonylC₁₋₄alkyl, C₁₋₄alkoxycarbonylamino, amino, aminoC₁₋₄alkyl, carbamoyl, carbamoylC₁₋₄alkyl, cyano, cyanoC₁₋₄alkyl, hydroxy, hydroxyC₁₋₄alkyl, or a group of Formula (II):

Formula (II)

R⁶ is hydrogen or C₁₋₄alkyl;

20 R⁵ and R⁷ are independently selected from hydrogen, C₁₋₄alkyl or a group of Formula (III):

$$-(CH_2)_t$$
 $Y-(CH_2)_t$ $Z-R^8$

Formula (III)

wherein Y is selected from -NH-, -O or a bond;

Z is selected from -NH-, -O-, -C(O)- or a bond;

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r is an integer from 0 to 4;

t is an integer from 0 to 1;

R⁸ is hydrogen, C₁₋₄alkyl, C₁₋₄alkoxy, aryl, 5 or 6 membered heterocyclyl, 5- or 6-membered heteroaryl, wherein aryl, heteroaryl or heterocyclyl are optionally substituted by C₁₋₄alkyl, C₁₋₄alkoxy, or a group of Formula (IV):

$$(CH_2)_n$$
 $(CH_2)_n$ $(CH_2)_n$

Formula (IV)

wherein n is an integer from 1 to 6, and;

R⁹ and R¹⁰ are independently selected from hydrogen,

C₁₋₄alkyl or aryl;

p is an integer from 0 to 1; and q is an integer from 0 to 3;

with the proviso that:

- (i) when R³ is cyano then R⁴ cannot be a group of Formula (II), and
 - (ii) when q is 0, R^3 is cyano and X is -S—then R^4 is other than amino; or a salt, pro-drug or solvate thereof.
- The use of a compound of Formula (I), or a salt, pro-drug or solvate thereof, according to Claim 1 wherein: R¹ is hydroxy, amino, —OPO₃H₂, or C₁₋₄alkoxy, wherein the amino group is optionally substituted by an amino acid residue and the hydroxy group is optionally esterified.
 - 3. The use of a compound of Formula (I), or a salt, pro-drug or solvate thereof, according to either Claim 1 or Claim 2 wherein: X is —O— or —S—.
- 4. The use of a compound of Formula (I), or a salt, pro-drug or solvate thereof, according to any one of the preceding claims wherein: R³ is cyano.
 - 5. The use of a compound of Formula (I), or a salt, pro-drug or solvate thereof, according to Claim 1 wherein:

R¹ is selected from hydroxy, amino, —OPO₃H₂, or C₁₋₄alkoxy, wherein the amino group is optionally substituted by an amino acid residue;

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R² is hydrogen;

X is selected from: -O, -S, -SO or $-SO_2$;

p is 0 or 1;

q is an integer from 1 to 3;

R³ is selected from: hydrogen, cyano, carbamoyl, carbamoyl C_{1-4} alkyl, C_{1-4} alkanoy, or C_{1-4} alkoxycarbonyl;

 R^4 is selected from: hydrogen, cyano or carbamoyl; and R^5 is hydrogen or C_{1-4} alkyl.

6. The use of a compound of Formula (V) as a medicament,

$$(R^{1})_{q}$$
 $(CH_{2})_{p}$
 R^{3}
 R^{5}

Formula (V)

wherein:

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q is from 1 to 3; and

R¹, R², R³, R⁴, R⁵, X and p are as defined in Claim 1,

15 with the proviso that:

- (i) when R³ is cyano then R⁴ cannot be a group of Formula (II); and
- (ii) when $(R^1)_q$ is 4-methoxy, 4-amino, or 3,4,5-trimethoxy, p is 0 or 1, R^2 is hydrogen or 5-methoxy, R^3 is hydrogen, cyanomethyl or 2-aminoethyl, R^4 is hydrogen or ethoxycarbonyl then R^5 cannot be hydrogen or methyl;
- or a salt, pro-drug or solvate thereof.
 - 7. A compound of Formula (VIId),

$$(R^1)_q$$
 $(CH_2)_p$ X R^3 R^4 R^5

Formula (VIId)

wherein:

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R¹ is independently selected from hydroxy, amino, alkanoylamino, —OPO₃H₂, or C₁₋₄alkoxy, wherein the amino group is optionally substituted by an amino acid residue and the hydroxy group is optionally esterified;

X, p, R², R³, R⁴, and R⁵ are as defined in Claim 1;

q is an integer from 1 to 3; with the proviso that

- (i) when R³ is cyano then R⁴ cannot be a group of Formula (II); and
- (ii) when (R¹)_q is 4-methoxy, 4-amino or 3,4,5-trimethoxy, p is 0 or 1, R² is hydrogen or 5-methoxy, R³ is hydrogen, cyanomethyl or 2-aminoethyl, R⁴ is hydrogen or ethoxycarbonyl, then R⁵ cannot be hydrogen or methyl; or a salt, pro-drug or solvate thereof.
- 8. A compound of Formula (VI), according to Claim 7;

$$(R^1)_q$$
 $(CH_2)_p$ O R^3 R^4 R^5

Formula (VI)

wherein:

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q is from 1 to 3;

 p, R^1, R^2, R^3, R^4 , and R^5 are as defined in Claim 7;

with the proviso that

- (i) when R³ is cyano then R⁴ cannot be a group of Formula (II);
- (ii) when (R¹)_q is 4-methoxy, 4-amino, or 3,4,5-trimethoxy, p is 0 or 1, R² is hydrogen or 5-methoxy, R³ is hydrogen, cyanomethyl or 2-aminoethyl, R⁴ is hydrogen or ethoxycarbonyl then R⁵ cannot be hydrogen or methyl; or a salt, pro-drug or solvate thereof.

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9. A compound of Formula (VIIc), according to Claim 7;

$$(R^1)_q$$
 $(CH_2)_p$
 X
 R^3
 R^4

Formula (VIIc)

wherein:

- 5 X is selected from: -S, -SO or $-SO_2$; and wherein: p, q, R^1 , R^2 , R^3 , R^4 , and R^5 are as defined in Claim 7; with the proviso that
 - (i) when R³ is cyano then R⁴ cannot be a group of Formula (II);
- (ii) when $(R^1)_q$ is 4-amino, p is 0 or 1, R^2 is hydrogen, R^3 is hydrogen, R^4 is hydrogen or ethoxycarbonyl, then R^5 cannot be hydrogen; or a salt, pro-drug or solvate thereof.
 - 10. A compound, according to Claim 7, selected from:

3-cyano-5-phenylsulphanyl-1*H*-indole;

3-cyano-5-phenoxy-1*H*-indole;

3-cyano-5-(4-hydroxyphenoxy)-1H-indole; and

2-cyano-5-benzyloxy-1*H*-indole;

1-methyl-3-cyano-5-(4-hydroxy-3,5-dimethoxyphenoxy)-1*H*-indole;

1-methyl-3-cyano-5-(4-phosphonoxy-3,5-dimethoxyphenoxy)-1*H*-indole;

20 3-cyano-5-(3,4-dimethoxyphenylsulphanyl)-1*H*-indole;

1-methyl-3-cyano-5-(3,4-dimethoxyphenylsulphanyl)-1H-indole;

3-cyano-5-(3,4-dimethoxyphenylsulphonyl)-1H-indole; and

1-methyl-3-cyano-5-(3,4-dimethoxyphenylsulphonyl)-1*H*-indole; or salt, pro-drug or solvate thereof.

25 11. A pharmaceutical composition comprising a compound according to any one of Claims 7 to 10 or a pharmaceutically acceptable salt, solvate or pro-drug thereof.

- 12. A process for preparing a compound of Formula (I), or salt, solvate or pro-drug thereof, which process (wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰, X, Y, Z, n, p, q, r and t are unless otherwise specified as defined in Claim 1, comprising:
 - a) for compounds of Formula (I) wherein X is —O—, or —S—, reacting a compound of Formula (A) with a compound of Formula (B),

$$(R^1)_q$$
 $(CH_2)_p$
 R^3
 R^4
Formula (A)
Formula (B)

wherein L¹ is a leaving group;

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b) for compounds of Formula (I) in which R¹ comprises amino, reduction of a compound of Formula (C):

$$(R^1)_{q-1}$$
 $(CH_2)_p$ X R^3 R^4

Formula (C);

- c) for compounds of Formula (I) wherein R^5 is C_{1-4} alkyl, reacting a compound of Formula (I) wherein R^5 is hydrogen with a suitable alkylhalide;
- d) for compounds of Formula (I) wherein R¹ comprises an amino group substituted by an amino acid residue, reacting a compound of Formula (D) with an amino acid,

$$(R^1)_{q-1}$$
 $(CH_2)_p - X$ R^3 R^4

Formula (D);

e) for compounds of Formula (I) in which R³ is a group of Formula (II) and R⁷ is a group of Formula (III), reacting a compounds of Formula (I) in which R³ is a group of Formula (II) and R⁷ is hydrogen with compounds of Formula (E) below, in which L² is a leaving group:

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Formula (E);

- f) for compounds of Formula (I) in which R^4 is hydrogen, reacting a compounds of Formula (I) in which R^3 is hydrogen and R^4 is hydrogen with a compounds of L^3R^3 in which L^3 is a leaving group; and
- g) for compounds of Formula (I) in which R¹ is an esterified hydroxyl group, reacting a compound of Formula (F) with an appropriate carboxylic acid or carboxylic acid derivative;

$$(R^1)_{q-1}$$
 $(CH_2)_p$
 R^3
 R^4

Formula (F)

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and thereafter if necessary:

- i) converting a compound of Formula (I) into another compound of Formula (I);
- ii) removing any protecting groups;
- iii) forming a salt, pro-drug or solvate.

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